

AMENDED IN ASSEMBLY AUGUST 27, 2004

AMENDED IN ASSEMBLY AUGUST 23, 2004

AMENDED IN ASSEMBLY JUNE 19, 2003

AMENDED IN SENATE MAY 7, 2003

AMENDED IN SENATE APRIL 21, 2003

SENATE BILL

No. 118

Introduced by Senator Bowen

February 3, 2003

An act to *amend Section 25744 of, to add Section 25402.10 to, and to add Division 16.7 (commencing with Section 26420) to, the Public Resources Code, and to amend Sections ~~399.15 and 2827~~ of 399.6, 399.8, 2827, 3345, and 3370 of, and to add Sections 385.1 and 760 to, and to add Chapter 8 (commencing with Section 2830) to Part 2 of Division 1 of, the Public Utilities Code, relating to solar energy.*

LEGISLATIVE COUNSEL'S DIGEST

SB 118, as amended, Bowen. ~~Solar~~ Energy: *renewable energy: solar energy generation.*

(1) *The existing Public Utilities Act requires the Public Utilities Commission (CPUC) to require Pacific Gas and Electric Company, San Diego Gas and Electric, and Southern California Edison to identify a separate electrical rate component to fund programs that enhance system reliability and provide in state benefits. This rate component is a nonbypassable element of local distribution and collected on the basis of usage. The funds are collected to support cost effective energy efficiency and conservation activities, public interest research and*

development not adequately provided by competitive and regulated markets, and renewable energy resources. Existing commission resolutions refer to the nonbypassable rate component as a “Public Goods Charge” (PGC). Existing law requires the State Energy Resources Conservation and Development Commission (Energy Commission) to transfer funds collected by electrical corporations for in-state operation and development of existing and new and emerging renewable resources technologies into the Renewable Resource Trust Fund, to fund specified programs. Existing law requires that 17.5% of the money collected under the renewable energy PGC be used to fund the Emerging Renewable Resources Account within the Renewable Resource Trust Fund for the purpose of a multiyear, consumer-based program to foster the development of emerging renewable technologies in distributed generation applications.

Under the Reliable Electric Service Investments Act, the Energy Commission was required to hold moneys collected for renewable energy and deposited in the Renewable Resource Trust Fund until further action by the Legislature. The act requires the Energy Commission to create an initial investment plan, in accordance with specified objectives, to govern the allocation of funds in the Renewable Resource Trust Fund collected between January 1, 2002, and January 1, 2007, in order to ensure a fully competitive and self-sustaining California renewable energy supply. Existing law requires the Energy Commission, on or before March 31, 2006, to prepare an investment plan proposing the application of moneys collected between January 1, 2007, and January 1, 2012, and prohibits expenditures from the accounts within the Renewable Resource Trust Fund without further legislative action.

This bill would enact the Solar Energy Peak Procurement Act. The bill would except moneys expended through the Emerging Renewable Resources Account from the requirement that the Energy Commission prepare an investment plan on or before March 31, 2006, and would authorize the commission to advance moneys to the Emerging Renewable Resources Account and to expend those moneys without further legislative action, subject to certain existing repayment provisions. The bill would require the Energy Commission to ensure proportional program support through the Emerging Renewable Resources Account, for affordable housing units, within certain limits.

(2) Existing law requires the Public Utilities Commission, in consultation with the Independent System Operator and the State



Energy Resources Conservation and Development Commission (*Energy Commission*), to adopt initiatives, on or before March 7, 2001, to reduce demand for electricity and reduce load during peak demand periods, including differential incentives for renewable or super clean distributed generation resources. Existing law requires the commission, in consultation with the Energy Commission, to administer, until January 1, 2008, a self-generation incentive program for distributed generation resources in the same form that exists on January 1, 2004.

Existing law requires the Energy Commission to expand and accelerate development of alternative sources of energy, including solar resources. Existing law requires the Energy Commission, until January 1, 2006, and to the extent that funds are appropriated for that purpose in the annual Budget Act, to implement a grant program to accomplish specified goals, including making solar energy systems cost competitive with alternate forms of energy.

This bill would *create the Solar Energy Peak Procurement Fund for expenditure, upon appropriation, for a state program for subsidizing all customer classes for the installed cost of grid-connected solar photovoltaic systems in the service territory of investor-owned utilities. The bill would require the ~~State Energy Resources Conservation and Development~~ Commission, not later than July 1, 2005, to award rebates to support the installation of grid-connected solar energy systems, subject to a prescribed declining schedule terminating as of January 1, 2015. The bill would ~~require 5% of the program to be dedicated for defined affordable housing. The bill would also require the commission to develop a zero-interest revolving loan program by June 30, 2005, to finance grid-connected solar energy systems for affordable housing projects. These provisions would be known as the Solar Energy Peak Procurement Act~~ require the Energy Commission to ensure proportional program support for affordable housing units, within certain limits.*

The bill would require the ~~Public Utilities Commission~~ CPUC to open a proceeding to examine the relative costs and benefits between solar rebate programs and commission-administered interruptible demand reduction programs ~~to establish a program, known as the Solar Energy Peak Procurement Program, to encourage the use of photovoltaic systems. The bill would require the commission to fund the program by reducing purchases of electricity, spending unallocated funds previously authorized for demand management and interruptible~~

programs, and substituting a photovoltaic incentive program for less cost effective demand management and interruptible programs.

~~The bill would create the Solar Peak Energy Procurement Fund for expenditure, upon appropriation, for a state program of subsidizing all customer classes for the installed cost grid-connected solar photovoltaic systems in the service territory of investor-owned utilities. The bill would also create the Solar Peak Energy Affordable Housing Revolving Fund for the same purpose, but limited to subsidies for defined affordable housing units. The bill would require the Public Utilities Commission CPUC to direct utilities to deposit a portion of electric rate revenues in the Solar Peak Energy Peak Procurement Fund from unallocated funds previously authorized for demand management and interruptible programs and rates that previously paid for those programs and that the commission CPUC determines are less cost effective than the photovoltaic incentive system established by the bill. The bill would require the CPUC to make certain reports to the Legislature.~~

(3) Existing law requires that the PGC be adjusted annually at a rate equal to the lesser of the annual growth in electric commodity sales or inflation, as defined.

This bill would require that the amounts collected to fund energy efficiency, renewable energy, and research, development, and demonstration during 2005 and 2006, be set at the levels established by the CPUC for 2004, and would require that any moneys collected above those 2004 levels during 2005 and 2006, be transferred to the Solar Energy Peak Procurement Fund.

(4) Existing law requires each local publicly owned electric utility to establish a nonbypassable usage based charge to fund investments in specified public purpose programs, including energy efficiency and conservation, investment in renewable energy resources, research, development and demonstration programs, and providing services for low-income electricity customers. The charge is required to be not less than the lowest expenditure of the 3 largest electrical corporations in California based on a percentage of revenue.

This bill would require every local publicly owned electric utility, as defined, to establish a solar program consistent with the Solar Energy Peak Procurement Program. Each local publicly owned electric utility would be required to report, on an annual basis, to its customers and to the Energy Commission, information relative to the utility's solar program and would authorize the Energy Commission to establish guidelines for the information to be included in the annual report.



(5) *Existing law requires a solar energy system to meet applicable standards and requirements imposed by state and local permitting authorities.*

This bill would require that beginning January 1, 2010, a seller of production homes, as defined, offer a solar energy system, as defined, option to all customers negotiating to purchase a new production home and to disclose certain information.

~~(2) Existing law requires the Public Utilities Commission to establish a renewables portfolio standard requiring all electrical corporations to procure a minimum quantity of output from renewable energy resources, as specified. Existing law requires the commission to implement prescribed annual procurement targets for electrical corporations use of renewable energy resources.~~

~~This bill would specify that electricity generated from net-metered solar energy systems shall be counted towards an electrical corporation's annual renewable energy resource procurement targets.~~

~~(3)~~

(6) Existing law requires every electric service provider, as defined, to develop a standard contract or tariff providing for net energy metering, and to make this contract available to eligible customer generators, upon request. Existing law requires every electric service provider, upon request, to make available to eligible customer generators contracts for net energy metering on a first-come-first-served basis until the time that the total rated generating capacity used by eligible customer generators exceeds 0.5% of the electric service provider's aggregate customer peak demand.

This bill would require that every electric service provider, upon request, make available to eligible customer generators contracts for net energy metering on a first-come-first-served basis until the time that the total rated generating capacity used by eligible customer generators exceeds ~~3%~~ 1.5% of the electric service provider's aggregate customer peak demand.

~~(4) The bill would not become operative unless Assembly Bill 2006 is enacted.~~

(7) *Existing law authorizes the CPUC to fix the rates and charges for every public utility, and requires that those rates and charges be just and reasonable.*

This bill would require the CPUC, in collaboration with the Energy Commission, to develop optional time-variant electricity pricing tariffs for all customers that are not subject to mandatory time-variant pricing.

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: no.

The people of the State of California do enact as follows:

1 SECTION 1. This act shall be known, and may be cited as the
2 Solar Energy Peak Procurement Act.
3 SEC. 2. *Section 25402.10 is added to the Public Resources*
4 *Code, to read:*
5 *25402.10. (a) As used in this section, the following terms*
6 *have the following meanings:*
7 *(1) “kW” means kilowatts as measured from the alternating*
8 *current side of the solar energy system inverter consistent with*
9 *Section 223 of Title 15 of the United States Code.*
10 *(2) “Production home” means a single family residence*
11 *constructed as part of a development of at least 50 homes per*
12 *project that is intended or offered for sale.*
13 *(3) “Solar energy system” means a photovoltaic solar collector*
14 *or other photovoltaic solar energy device that has a primary*
15 *purpose of providing for the collection, and distribution of solar*
16 *energy for the generation of electricity, and that produces at least*
17 *1 kW alternating current rated peak electricity.*
18 *(b) A seller of production homes shall, beginning January 1,*
19 *2010, offer a solar energy system option to all customers that enter*
20 *into negotiations to purchase a new production home constructed*
21 *on land for which an application for a tentative subdivision map*
22 *has been deemed complete on or after January 1, 2007, and shall*
23 *disclose the following:*
24 *(1) The total installed cost of the solar energy system option.*
25 *(2) The estimated cost savings associated with the solar energy*
26 *system option, as determined by the commission.*
27 SEC. 4. *Section 25744 of the Public Resources Code is*
28 *amended to read:*
29 *25744. (a) Seventeen and one-half percent of the money*
30 *collected pursuant to the renewable energy public goods charge*
31 *shall be used for a multiyear, consumer-based program to foster*
32 *the development of emerging renewable technologies in*
33 *distributed generation applications.*

(b) Any funds used for emerging technologies pursuant to this section shall be expended ~~in accordance with the report~~, subject to all of the following requirements:

(1) Funding for emerging technologies shall be provided through a competitive, market-based process that shall be in place for a period of not less than five years, and shall be structured so as to allow eligible emerging technology manufacturers and suppliers to anticipate and plan for increased sale and installation volumes over the life of the program.

(2) The program shall provide monetary rebates, buydowns, or equivalent incentives, subject to subparagraph (C), to purchasers, lessees, lessors, or sellers of eligible electricity generating systems. Incentives shall benefit the end-use consumer of renewable generation by directly and exclusively reducing the purchase or lease cost of the eligible system, or the cost of electricity produced by the eligible system. Incentives shall be issued on the basis of the rated electrical generating capacity of the system measured in watts, or the amount of electricity production of the system, measured in kilowatthours. Incentives shall be limited to a maximum percentage of the system price, as determined by the commission.

(3) Eligible distributed emerging technologies are photovoltaic, solar thermal electric, fuel cell technologies that utilize renewable fuels, and wind turbines of not more than 50 kilowatts rated electrical generating capacity per customer site, and other distributed renewable emerging technologies that meet the emerging technology eligibility criteria established by the commission. Eligible electricity generating systems are intended primarily to offset part or all of the consumer's own electricity demand, and shall not be owned by local publicly owned electric utilities, nor be located at a customer site that is not receiving distribution service from an electrical corporation that is subject to the renewable energy public goods charge and contributing funds to support programs under this chapter. All eligible electricity generating system components shall be new and unused, shall not have been previously placed in service in any other location or for any other application, and shall have a warranty of not less than five years to protect against defects and undue degradation of electrical generation output. Systems and their fuel resources shall be located on the same premises of the

1 end-use consumer where the consumer's own electricity demand
2 is located, and all eligible electricity generating systems shall be
3 connected to the utility grid in California. The commission may
4 require eligible electricity generating systems to have meters in
5 place to monitor and measure a system's performance and
6 generation. Only systems that will be operated in compliance with
7 applicable law and the rules of the Public Utilities Commission
8 shall be eligible for funding.

9 (4) The commission shall limit the amount of funds available
10 for any system or project of multiple systems and reduce the level
11 of funding for any system or project of multiple systems that has
12 received, or may be eligible to receive, any government or utility
13 funds, incentives, or credit.

14 (5) In awarding funding, the commission may provide
15 preference to systems that provide tangible demonstrable benefits
16 to communities with a plurality of minority or low-income
17 populations.

18 (6) In awarding funding, the commission shall develop and
19 implement eligibility criteria and a system that provides
20 preference to systems based upon system performance, taking into
21 account factors, including, but not limited to, shading, insulation
22 levels, and installation orientation.

23 (7) At least once annually, the commission shall publish and
24 make available to the public the balance of funds available for
25 emerging renewable energy resources for rebates, buydowns, and
26 other incentives for the purchase of these resources.

27 *(c) The commission shall ensure proportional program*
28 *support, not to exceed 10 percent of overall program funds, for the*
29 *installation of solar energy systems on the new construction and*
30 *rehabilitation of affordable housing units, including single and*
31 *multifamily residential housing. In addition, the commission shall*
32 *ensure that additional and proportional resources, not to exceed*
33 *5 percent of overall program funds, are provided for the unique*
34 *needs of subsidized low-income housing through targeted*
35 *financing mechanisms and support, including a revolving loan*
36 *fund, technical assistance, and other needs as identified in*
37 *consultation with the California Tax Credit Allocation Committee.*

38 *(d) Nonresidential rebates awarded pursuant to subdivision (b)*
39 *or funded through the Solar Energy Peak Procurement Program*
40 *pursuant to Chapter 8 (commencing with Section 2830) of Part 2*

of Division 1 of the Public Utilities Code, shall be paid directly to the contractor who will perform or subcontract the construction work pursuant to an agreement between the commission and the contractor.

Division 16.7 (commencing with Section 26421) is added to the Public Resources Code, to read:

DIVISION 16.7. SOLAR ENERGY SYSTEM REBATES

26421. (a) “Affordable housing,” as used in this division, means a housing project undertaken pursuant to Section 50052.5, 50053, or 50199.4 of the Health and Safety Code.

(b) “Solar energy system,” as used in this division, means a photovoltaic solar collector or other photovoltaic solar energy device that has a primary purpose of providing for the collection, storage, and distribution of solar energy for the generation of electricity. A solar energy system shall have a minimum manufacturer’s warranty, as determined by the commission, and shall meet all applicable safety and performance standards established by the National Electrical Code, the institute of Electrical and Electronics Engineers, and accredited testing laboratories such as Underwriters laboratories and, where applicable, rules of the Public Utilities Commission regarding safety and reliability.

26422. (a) Not later than July 1, 2005, the commission shall award rebates to support the installation of grid-connected solar energy systems and shall adopt a schedule of declining rebates for this purpose, subject to all of the following:

(1) The maximum rebate in year one shall be no greater than ~~three dollars (\$3)~~ *two dollars eighty cents (\$2.80)* per watt, and shall decline each year thereafter as determined by the commission.

(2) The rebate shall be zero as of January 1, 2015.

(b) The program shall be funded through the Solar ~~Peak Energy~~ *Energy Peak* Procurement Fund as provided in Section ~~2832~~ *2834* of the Public Utilities Code.

~~(c) Five percent of funding received for this program shall be dedicated to rebates for reducing the cost of grid-connected solar energy systems for affordable housing.~~

~~(d) By June 30, 2005 the commission shall also develop a zero-interest revolving loan program to finance grid-connected solar energy systems for affordable housing projects. This program shall be funded from the Solar Peak Energy Affordable Housing Revolving Fund as provided in Section 2832 of the Public Utilities Code.~~

(c) The president of the Public Utilities Commission and the chairman of the State Energy Resources Conservation and Development Commission shall, no later than March of 2005, appear before the Senate Committee on Energy, Utilities and Communications and the Assembly Committee on Utilities and Commerce to issue a progress report on meeting the deadline for the creation of the Solar Energy Peak Procurement Program.

(d) The commission shall specify that this program is on a first-come first-serve basis for applicants.

26423. The commission shall ensure proportional program support, not to exceed 10 percent of overall program funds, for installation of solar energy systems on the new construction and rehabilitation of affordable housing units, including single and multifamily residential housing. In addition to the rebate, the commission shall also ensure that additional and proportional resources, not to exceed 5 percent of overall program funds, are provided for the unique needs of subsidized low-income housing through targeted financing mechanisms and support, including a revolving loan fund, technical assistance, and other needs as identified in consultation with the California Tax Credit Allocation Committee.

~~SEC. 2. Section 399.15 of the Public Utilities Code is amended to read:~~

~~399.15. (a) In order to fulfill unmet long-term resource needs, the commission shall establish a renewables portfolio standard requiring all electrical corporations to procure a minimum quantity of output from eligible renewable energy resources as a specified percentage of total kilowatthours sold to their retail end-use customers each calendar year, if sufficient funds are made available pursuant to paragraph (2), and Sections 399.6 and 383.5 to cover the above-market costs of eligible renewables, and subject to all of the following:~~

~~(1) An electric corporation shall not be required to enter into long-term contracts with eligible renewable energy resources that~~

1 exceed the market prices established pursuant to subdivision (c) of
2 this section.

3 ~~(2) The Energy Commission shall provide supplemental~~
4 ~~energy payments from funds in the New Renewable Resources~~
5 ~~Account in the Renewable Resource Trust Fund to eligible~~
6 ~~renewable energy resources pursuant to Section 383.5, consistent~~
7 ~~with this article, for above-market costs. Indirect costs associated~~
8 ~~with the purchase of eligible renewable energy resources, such as~~
9 ~~imbalance energy charges, sale of excess energy, decreased~~
10 ~~generation from existing resources, or transmission upgrades shall~~
11 ~~not be eligible for supplemental energy payments, but shall be~~
12 ~~recoverable by an electrical corporation in rates, as authorized by~~
13 ~~the commission.~~

14 ~~(3) For purposes of setting annual procurement targets, the~~
15 ~~commission shall establish an initial baseline for each electrical~~
16 ~~corporation based on the actual percentage of retail sales procured~~
17 ~~from eligible renewable energy resources in 2001, and, to the~~
18 ~~extent applicable, adjusted going forward pursuant to subdivision~~
19 ~~(a) of Section 399.12.~~

20 ~~(4) Electricity generated from net-metered solar energy~~
21 ~~systems shall be counted towards an electrical corporation's~~
22 ~~annual renewable energy resource procurement targets.~~

23 ~~(b) The commission shall implement annual procurement~~
24 ~~targets for each electrical corporation as follows:~~

25 ~~(1) Beginning on January 1, 2003, each electrical corporation~~
26 ~~shall, pursuant to subdivision (a), increase its total procurement of~~
27 ~~eligible renewable energy resources by at least an additional 1~~
28 ~~percent of retail sales per year so that 20 percent of its retail sales~~
29 ~~are procured from eligible renewable energy resources no later~~
30 ~~than December 31, 2017. An electrical corporation with 20 percent~~
31 ~~of retail sales procured from eligible renewable energy resources~~
32 ~~in any year shall not be required to increase its procurement of such~~
33 ~~resources in the following year.~~

34 ~~(2) Only for purposes of establishing these targets, the~~
35 ~~commission shall include all power sold to retail customers by the~~
36 ~~Department of Water Resources pursuant to Section 80100 of the~~
37 ~~Water Code in the calculation of retail sales by an electrical~~
38 ~~corporation.~~

39 ~~(3) In the event that an electrical corporation fails to procure~~
40 ~~sufficient eligible renewable energy resources in a given year to~~

1 meet any annual target established pursuant to this subdivision, the
2 electrical corporation shall procure additional eligible renewable
3 energy resources in subsequent years to compensate for the
4 shortfall if sufficient funds are made available pursuant to
5 paragraph (2), and Sections 399.6 and 383.5 to cover the
6 above-market costs of eligible renewables.

7 ~~(4) If supplemental energy payments from the Energy~~
8 ~~Commission, in combination with the market prices approved by~~
9 ~~the commission, are insufficient to cover the above-market costs~~
10 ~~of eligible renewable energy resources, the commission shall~~
11 ~~allow an electrical corporation to limit its annual procurement~~
12 ~~obligation to the quantity of eligible renewable energy resources~~
13 ~~that can be procured with available supplemental energy~~
14 ~~payments.~~

15 ~~(e) The commission shall establish a methodology to determine~~
16 ~~the market price of electricity for terms corresponding to the~~
17 ~~length of contracts with renewable generators, in consideration of~~
18 ~~the following:~~

19 ~~(1) The long-term market price of electricity for fixed-price~~
20 ~~contracts, determined pursuant to the electrical corporation's~~
21 ~~general procurement activities as authorized by the commission.~~

22 ~~(2) The long-term ownership, operating, and fixed-price fuel~~
23 ~~costs associated with fixed-price electricity from new generating~~
24 ~~facilities.~~

25 ~~(3) The value of different products including baseload,~~
26 ~~peaking, and as-available output.~~

27 ~~(d) The establishment of a renewables portfolio standard shall~~
28 ~~not constitute implementation by the commission of the federal~~
29 ~~Public Utility Regulatory Policies Act of 1978 (Public Law~~
30 ~~95-617).~~

31 ~~(e) The commission shall consult with the Energy Commission~~
32 ~~in calculating market prices under subdivision (c) and establishing~~
33 ~~other renewables portfolio standard policies.~~

34 ~~SEC. 3.—~~

35 *SEC. 5. Section 385.1 is added to the Public Utilities Code, to*
36 *read:*

37 *385.1. (a) Every local publicly owned electric utility, as*
38 *defined in Section 9604, that has retail customers, shall establish*
39 *a solar program consistent with the Solar Energy Peak*
40 *Procurement Program established pursuant to Chapter 8*

(commencing with Section 2830) of Part 2 and Division 16.7 (commencing with Section 26421) of the Public Resources Code, to fund program expenditure levels consistent with those established for the three largest electrical corporations in California, at a rate proportional to the size of the ratepayer base served by the local publicly owned electric utility. Every local publicly owned electric utility shall establish the program within a reasonable period of time, but not to exceed six months, after the commission adopts and implements any solar homes program pursuant to Chapter 8 (commencing with Section 2830).

(b) Each local publicly owned electric utility shall report, on an annual basis, to its customers and to the State Energy Resources Conservation and Development Commission, information relative to the utility's solar program. The State Energy Resources Conservation and Development Commission may establish guidelines for the information to be included in the annual report.

(c) The charge imposed pursuant to this subdivision shall fund the local publicly owned electric utility's administrative and reporting costs pursuant to this section.

SEC. 6. Section 399.6 of the Public Utilities Code is amended to read:

399.6. (a) In order to optimize public investment and ensure that the most cost-effective and efficient investments in renewable resources are vigorously pursued, the Energy Commission shall create an investment plan as set forth in paragraphs (1) to (3), inclusive, to govern the allocation of funds provided pursuant to this article. The Energy Commission's long-term goal shall be a fully competitive and self-sustaining California renewable energy supply. The investment plan shall be in accordance with all of the following:

(1) The investment plan's objective shall be to increase, in the near term, the quantity of California's electricity generated by in-state renewable energy resources, while protecting system reliability, fostering resource diversity, and obtaining the greatest environmental benefits for California residents.

(2) An additional objective of the plan shall be to identify and support emerging renewable energy technologies that have the greatest near-term commercial promise and that merit targeted assistance.

(3) The investment plan shall contain specific numerical targets, reflecting the projected impact of the plan, for both of the following:

(A) Increased quantity of California electrical generation produced from emerging technologies and from overall renewable resources.

(B) Increased supply of renewable generation available from facilities other than those selling to investor-owned utilities under contracts entered into prior to 1996 under the federal Public Utilities Regulatory Policies Act of 1978 (P.L. 95-617).

(b) The Energy Commission shall, on an annual basis, evaluate progress on meeting the targets set forth in subparagraphs (A) and (B) of paragraph (3) of subdivision (a), or any substitute provisions adopted by the Legislature upon review of the investment plan, and assess the impact of the investment plan on reducing the cost to Californians of renewable energy generation.

(c) In preparing these investment plans, the Energy Commission shall recommend allocations among all of the following:

(1) (A) Except as provided in subparagraph (B), production incentives for new renewable energy, including repowered or refurbished renewable energy.

(B) Allocations may not be made for renewable energy that is generated by a project that remains under a power purchase contract with an electrical corporation originally entered into prior to September 24, 1996, whether amended or restated thereafter.

(C) Notwithstanding subparagraph (B), production incentives for incremental new, repowered, or refurbished renewable energy from existing projects under a power purchase contract with an electrical corporation originally entered into prior to September 24, 1996, whether amended or restated thereafter, may be allowed in any month, if all of the following occur:

(i) The project's power purchase contract provides that all energy delivered and sold under the contract is paid at a price that does not exceed commission-approved short-run avoided cost of energy.

(ii) Either of the following:

(I) The power purchase contract is amended to provide that the kilowatthours used to determine the capacity payment in any time-of-delivery period in any month under the contract shall be

1 equal to the actual kilowatthour production, but no greater than the
2 five-year average of the kilowatthours delivered for the
3 corresponding time-of-delivery period and month, in the years
4 1994 to 1998, inclusive.

5 (II) If a project's installed capacity as of December 31, 1998,
6 is less than 75 percent of the nameplate capacity as stated in the
7 power purchase contract, the power purchase contract is amended
8 to provide that the kilowatthours used to determine the capacity
9 payment in any time-of-delivery period in any month under the
10 contract shall be equal to the actual kilowatthour production, but
11 no greater than the product of the five-year average of the
12 kilowatthours delivered for the corresponding time-of-delivery
13 period and month, in the years 1994 to 1998, inclusive, and the
14 ratio of installed capacity as of December 31 of the previous year,
15 but not to exceed contract nameplate capacity, to the installed
16 capacity as of December 31, 1998.

17 (iii) The production incentive is payable only with respect to
18 the kilowatthours delivered in a particular month that exceeds the
19 corresponding five-year average calculated pursuant to clause (ii).

20 (2) Rebates, buydowns, or equivalent incentives for emerging
21 renewable technologies.

22 (3) Customer credits for renewables not under contract with a
23 utility.

24 (4) Customer education.

25 (5) Incentives for reducing fuel costs that are confirmed to the
26 satisfaction of the Energy Commission at solid fuel biomass
27 energy facilities in order to provide demonstrable environmental
28 and public benefits, including, but not limited to, air quality.

29 (6) Solar thermal generating resources that enhance the
30 environmental value or reliability of the electrical system and that
31 require financial assistance to remain economically viable, as
32 determined by the Energy Commission. The Energy Commission
33 may require financial disclosure from applicants for purposes of
34 this paragraph.

35 (7) Specified fuel cell technologies, if the Energy Commission
36 makes all of the following findings:

37 (A) The specified technologies have similar or better air
38 pollutant characteristics than renewable technologies in the
39 investment plan.

1 (B) The specified technologies require financial assistance to
2 become commercially viable by reference to wholesale generation
3 prices.

4 (C) The specified technologies could contribute significantly
5 to the infrastructure development or other innovation required to
6 meet the long-term objective of a self-sustaining, competitive
7 supply of renewable energy.

8 (8) Existing wind-generating resources, if the Energy
9 Commission finds that the existing wind-generating resources are
10 a cost-effective source of reliable and environmental benefits
11 compared with other eligible sources, and that the existing
12 wind-generating resources require financial assistance to remain
13 economically viable, as determined by the Energy Commission.
14 The Energy Commission may require financial disclosure from
15 applicants for the purposes of this paragraph.

16 (d) The commission shall establish a cap on the aggregate
17 amount of funds that may be awarded to public entities from the
18 program that provides customer credits for renewables. The intent
19 of the cap is to assure adequate funding of credits for residential
20 and small commercial customers.

21 ~~(e) Notwithstanding any other provision of law, moneys~~
22 ~~collected for renewable energy pursuant to this article shall be~~
23 ~~transferred to the Renewable Resource Trust Fund of the Energy~~
24 ~~Commission, to be held until further action by the Legislature.~~
25 The Energy Commission shall prepare and submit to the
26 Legislature, on or before March 31, 2001, an initial investment
27 plan for these moneys, addressing the application of moneys
28 collected between January 1, 2002, and January 1, 2007. The
29 initial investment plan shall also include an evaluation of and
30 report to the Legislature regarding the appropriateness and
31 structure of a mandatory state purchase of renewable energy. On
32 or before March 31, 2006, the Energy Commission shall prepare
33 an investment plan proposing the application of moneys collected
34 between January 1, 2007, and January 1, 2012. *No Except for those*
35 *moneys expended through the Emerging Renewable Resources*
36 *Account, no moneys may be expended in the years covered by*
37 *these plans without further legislative action.*

38 (f) *Notwithstanding subdivision (e), the commission may*
39 *advance moneys to the Emerging Renewable Resources Account*
40 *and expend those moneys without further legislative action,*

1 *subject to subdivision (f) of Section 25751 of the Public Resources*
2 *Code.*

3 *SEC. 7. Section 399.8 of the Public Utilities Code is amended*
4 *to read:*

5 399.8. (a) In order to ensure that the citizens of this state
6 continue to receive safe, reliable, affordable, and environmentally
7 sustainable electric service, it is the policy of this state and the
8 intent of the Legislature that prudent investments in energy
9 efficiency, renewable energy, and research, development and
10 demonstration shall continue to be made.

11 (b) (1) Every customer of an electrical corporation, shall pay
12 a nonbypassable system benefits charge authorized pursuant to
13 this article. The system benefits charge shall fund energy
14 efficiency, renewable energy, and research, development and
15 demonstration.

16 (2) Local publicly owned electric utilities shall continue to
17 collect and administer system benefits charges pursuant to Section
18 385.

19 (c) (1) The commission shall require each electrical
20 corporation to identify a separate rate component to collect
21 revenues to fund energy efficiency, renewable energy, and
22 research, development and demonstration programs authorized
23 pursuant to this section beginning January 1, 2002, through
24 January 1, 2012. The rate component shall be a nonbypassable
25 element of the local distribution service and collected on the basis
26 of usage.

27 (2) This rate component may not exceed, for any tariff
28 schedule, the level of the rate component that was used to recover
29 funds authorized pursuant to Section 381 on January 1, 2000. If the
30 amounts specified in paragraph (1) of subdivision (d) are not
31 recovered fully in any year, the commission shall reset the rate
32 component to restore the unrecovered balance, provided that the
33 rate component may not exceed, for any tariff schedule, the level
34 of the rate component that was used to recover funds authorized
35 pursuant to Section 381 on January 1, 2000. Pending restoration,
36 any annual shortfalls shall be allocated pro rata among the three
37 funding categories in the proportions established in paragraph (1)
38 of subdivision (d).

39 (d) The commission shall order San Diego Gas and Electric
40 Company, Southern California Edison Company, and Pacific Gas

1 and Electric Company to collect these funds commencing on
2 January 1, 2002, as follows:

3 (1) Two hundred twenty-eight million dollars (\$228,000,000)
4 per year in total for energy efficiency and conservation activities,
5 one hundred thirty-five million dollars (\$135,000,000) in total per
6 year for renewable energy, and sixty-two million five hundred
7 thousand dollars (\$62,500,000) in total per year for research,
8 development and demonstration. The funds for energy efficiency
9 and conservation activities shall continue to be allocated in
10 proportions established for the year 2000 as set forth in paragraph
11 (1) of subdivision (c) of Section 381.

12 (2) The amounts shall be adjusted annually at a rate equal to the
13 lesser of the annual growth in electric commodity sales or
14 inflation, as defined by the gross domestic product deflator. *The*
15 *amounts collected to fund energy efficiency, renewable energy, and*
16 *research, development and demonstration, from January 1, 2005,*
17 *to December 31, 2006, shall be those levels established by the*
18 *commission for 2004. Any additional moneys collected as a result*
19 *of the difference between the rate component amount specified in*
20 *paragraph (2) of subdivision (c) and the amounts required to be*
21 *collected pursuant to this subdivision, from January 1, 2005, to*
22 *December 31, 2006, shall be transferred at least quarterly to the*
23 *Solar Energy Peak Procurement Fund established pursuant to*
24 *Section 2833.*

25 (e) The commission and the Energy Commission shall retain
26 and continue their oversight responsibilities as set forth in Sections
27 381 and 383, and Chapter 7.1 (commencing with Section 25620)
28 and Chapter 8.6 (commencing with Section 25740) of Division 15
29 of the Public Resources Code.

30 (f) (1) On or before January 1, 2004, the Governor shall
31 appoint an independent review panel including, but not limited to,
32 members with expertise on the energy service needs of large and
33 small electricity consumers, system reliability issues, and
34 energy-related public policy. On or before January 1, 2005, the
35 panel shall prepare and submit to the Legislature and the Energy
36 Commission a report evaluating the energy efficiency, renewable
37 energy, and research, development and demonstration programs
38 funded under this section. Reasonable costs associated with the
39 review in each of the three program categories, including technical
40 assistance, may be charged to the relevant program category under

1 procedures to be developed by the commission for energy
2 efficiency and by the Energy Commission for renewable energy
3 and research development and demonstration.

4 (2) The report shall also assess all of the following:

5 (A) Whether ongoing programs are consistent with the
6 statutory goals.

7 (B) Whether potential synergies among the program categories
8 described in paragraph (1) that could provide enhanced public
9 value have been identified and incorporated in the programs.

10 (C) If established targets for increased renewable generation
11 are likely to be achieved.

12 (D) What changes should be made to result in a more efficient
13 use of public resources.

14 (3) The report shall also compare the Energy Commission's
15 programs with efforts undertaken by other states and assess, as an
16 alternative, the relative costs and benefits of adopting a tradable
17 minimum renewable energy requirement in California. The
18 evaluation shall include recommendations intended to optimize
19 renewable resource development at the least cost.

20 (4) For energy efficiency programs, the report shall include an
21 evaluation of all of the following:

22 (A) The net benefits secured for residential customers, taking
23 into account both public and private costs, including
24 improvements in that customer group's ability to avoid or reduce
25 consumption of relatively costly peak electricity.

26 (B) Whether the programs provide a balance of benefits to all
27 sectors that contribute to the funding.

28 (C) The extent to which competition in energy markets
29 including, but not limited to, load participation in ancillary
30 services markets, and improvements in technology affect the
31 continuing need for such programs.

32 (D) The status and growth of the private, competitive energy
33 services industry that provides energy efficiency services and
34 other energy products to customers.

35 (E) The commercial availability of any new technologies that
36 reduce electricity demands during high-priced periods.

37 (F) Customers' willingness and ability to reduce consumption
38 or adopt energy efficiency measures without program support.

39 (G) The extent to which the programs have delivered
40 cost-effective energy efficiency not adequately provided by

1 markets and as a result have reduced energy demand and
2 consumption.

3 (H) The relative cost-effectiveness of program expenditures
4 compared to other current or potential expenditures to enhance
5 system reliability.

6 (5) The report shall include specific recommendations aimed
7 at assisting the Legislature in determining whether to change or
8 eliminate the collection of the system benefits charge on or after
9 January 1, 2007.

10 (6) The panel may update and revise the report as needed.

11 (g) Promptly after receiving the panel's report, the commission
12 shall convene a proceeding to address implementation of the
13 panel's energy efficiency recommendations.

14 (h) An applicant for the Large Nonresidential Standard
15 Performance Contract Program funded pursuant to paragraph (1)
16 of subdivision (b) and an electrical corporation shall promptly
17 attempt to resolve disputes that arise related to the program's
18 guidelines and parameters prior to entering into a program
19 agreement. The applicant shall provide the electrical corporation
20 with written notice of any dispute. Within 10 business days after
21 receipt of the notice, the parties shall meet to resolve the dispute.
22 If the dispute is not resolved within 10 business days after the date
23 of the meeting, the electrical corporation shall notify the applicant
24 of his or her right to file a complaint with the commission, which
25 complaint shall describe the grounds for the complaint, injury, and
26 relief sought. The commission shall issue its findings in response
27 to a filed complaint within 30 business days of the date of receipt
28 of the complaint. Prior to issuance of its findings, the commission
29 shall provide a copy of the complaint to the electrical corporation,
30 which shall provide a response to the complaint to the commission
31 within five business days of the date of receipt. During the dispute
32 period, the amount of estimated financial incentives shall be held
33 in reserve until the dispute is resolved.

34 *SEC. 8. Section 760 is added to the Public Utilities Code, to*
35 *read:*

36 *760. The commission, in collaboration with the State Energy*
37 *Resources Conservation and Development Commission, shall*
38 *develop optional time-variant electricity pricing tariffs for all*
39 *customers that are not subject to mandatory time-variant pricing*
40 *as of January 1, 2004, including net metered customers.*

SEC. 9. Section 2827 of the Public Utilities Code is amended to read:

2827. (a) The Legislature finds and declares that a program to provide net energy metering for eligible customer-generators is one way to encourage substantial private investment in renewable energy resources, stimulate in-state economic growth, reduce demand for electricity during peak consumption periods, help stabilize California's energy supply infrastructure, enhance the continued diversification of California's energy resource mix, and reduce interconnection and administrative costs for electricity suppliers.

(b) As used in this section, the following definitions apply:

(1) "Electric service provider" means an electrical corporation, as defined in Section 218, a local publicly owned electric utility, as defined in Section 9604, or an electrical cooperative, as defined in Section 2776, or any other entity that offers electrical service. This section shall not apply to a local publicly owned electric utility, as defined in Section 9604 of the Public Utilities Code, that serves more than 750,000 customers and that also conveys water to its customers.

(2) "Eligible customer-generator" means a residential, small commercial customer as defined in subdivision (h) of Section 331, commercial, industrial, or agricultural customer of an electric service provider, who uses a solar or a wind turbine electrical generating facility, or a hybrid system of both, with a capacity of not more than one megawatt that is located on the customer's owned, leased, or rented premises, is interconnected and operates in parallel with the electric grid, and is intended primarily to offset part or all of the customer's own electrical requirements.

(3) "Net energy metering" means measuring the difference between the electricity supplied through the electric grid and the electricity generated by an eligible customer-generator and fed back to the electric grid over a 12-month period as described in subdivision (h). Net energy metering shall be accomplished using a single meter capable of registering the flow of electricity in two directions. An additional meter or meters to monitor the flow of electricity in each direction may be installed with the consent of the customer-generator, at the expense of the electric service provider, and the additional metering shall be used only to provide the information necessary to accurately bill or credit the

1 customer-generator pursuant to subdivision (h), or to collect solar
2 or wind electric generating system performance information for
3 research purposes. If the existing electrical meter of an eligible
4 customer-generator is not capable of measuring the flow of
5 electricity in two directions, the customer-generator shall be
6 responsible for all expenses involved in purchasing and installing
7 a meter that is able to measure electricity flow in two directions.
8 If an additional meter or meters are installed, the net energy
9 metering calculation shall yield a result identical to that of a single
10 meter. An eligible customer-generator who already owns an
11 existing solar or wind turbine electrical generating facility, or a
12 hybrid system of both, is eligible to receive net energy metering
13 service in accordance with this section.

14 (4) “Wind energy co-metering” means any wind energy
15 project greater than 50 kilowatts, but not exceeding one megawatt,
16 where the difference between the electricity supplied through the
17 electric grid and the electricity generated by an eligible
18 customer-generator and fed back to the electric grid over a
19 12-month period is as described in subdivision (h). Wind energy
20 co-metering shall be accomplished pursuant to Section 2827.8.

21 (5) “Co-energy metering” means a program that is the same in
22 all other respects as a net energy metering program, except that the
23 local publicly owned electric utility, as defined in Section 9604,
24 has elected to apply a generation-to-generation energy and
25 time-of-use credit formula as provided in subdivision (i).

26 (6) “Ratemaking authority” means, for an electrical
27 corporation as defined in Section 218, or an electrical cooperative
28 as defined in Section 2776, the commission, and for a local
29 publicly owned electric utility as defined in Section 9604, the local
30 elected body responsible for regulating the rates of the local
31 publicly owned utility.

32 (c) (1) Every electric service provider shall develop a standard
33 contract or tariff providing for net energy metering, and shall make
34 this contract available to eligible customer-generators, upon
35 request, on a first-come-first-served basis until the time that the
36 total rated generating capacity used by eligible
37 customer-generators exceeds 3 1.5 percent of the electric service
38 provider’s aggregate customer peak demand.

39 (2) On an annual basis, beginning in 2003, every electric service
40 provider shall make available to the ratemaking authority

information on the total rated generating capacity used by eligible customer-generators that are customers of that provider in the provider's service area. For those electric service providers who are operating pursuant to Section 394, they shall make available to the ratemaking authority the information required by this paragraph for each eligible customer-generator that is their customer for each service area of an electric corporation, local publicly owned electric utility, or electrical cooperative, in which the customer has net energy metering. The ratemaking authority shall develop a process for making the information required by this paragraph available to energy service providers, and for using that information to determine when, pursuant to paragraph (3), a service provider is not obligated to provide net energy metering to additional customer-generators in its service area.

(3) Notwithstanding paragraph (1), an electric service provider is not obligated to provide net energy metering to additional customer-generators in its service area when the combined total peak demand of all customer-generators served by all the electric service providers in that service area furnishing net energy metering to eligible customer-generators exceeds 3 1.5 percent of the aggregate customer peak demand of those electric service providers.

(d) Electric service providers shall make all necessary forms and contracts for net metering service available for download from the Internet.

(e) (1) Every electric service provider shall ensure that requests for establishment of net energy metering are processed in a time period not exceeding that for similarly situated customers requesting new electric service, but not to exceed 30 working days from the date the electric service provider receives a completed application form for net metering service, including a signed interconnection agreement from an eligible customer-generator and the electric inspection clearance from the governmental authority having jurisdiction. If an electric service provider is unable to process the request within the allowable timeframe, the electric service provider shall notify both the customer-generator and the ratemaking authority of the reason for its inability to process the request and the expected completion date.

(2) Electric service providers shall ensure that requests for an interconnection agreement from an eligible customer-generator

1 are processed in a time period not to exceed 30 working days from
2 the date the electric service provider receives a completed
3 application form from the eligible customer-generator for an
4 interconnection agreement. If an electric service provider is
5 unable to process the request within the allowable timeframe, the
6 electric service provider shall notify the customer-generator and
7 the ratemaking authority of the reason for its inability to process
8 the request and the expected completion date.

9 (f) (1) If a customer participates in direct transactions pursuant
10 to paragraph (1) of subdivision (b) of Section 365 with an electric
11 supplier that does not provide distribution service for the direct
12 transactions, the service provider that provides distribution service
13 for an eligible customer-generator is not obligated to provide net
14 energy metering to the customer.

15 (2) If a customer participates in direct transactions pursuant to
16 paragraph (1) of subdivision (b) of Section 365 with an electric
17 supplier, and the customer is an eligible customer-generator, the
18 service provider that provides distribution service for the direct
19 transactions may recover from the customer's electric service
20 provider the incremental costs of metering and billing service
21 related to net energy metering in an amount set by the ratemaking
22 authority.

23 (g) Each net energy metering contract or tariff shall be
24 identical, with respect to rate structure, all retail rate components,
25 and any monthly charges, to the contract or tariff to which the same
26 customer would be assigned if the customer did not use an eligible
27 solar or wind electrical generating facility, except that eligible
28 customer-generators shall not be assessed standby charges on the
29 electrical generating capacity or the kilowatthour production of an
30 eligible solar or wind electrical generating facility. The charges for
31 all retail rate components for eligible customer-generators shall be
32 based exclusively on the customer-generator's net kilowatthour
33 consumption over a 12-month period, without regard to the
34 customer-generator's choice of electric service provider. Any new
35 or additional demand charge, standby charge, customer charge,
36 minimum monthly charge, interconnection charge, or any other
37 charge that would increase an eligible customer-generator's costs
38 beyond those of other customers who are not customer-generators
39 in the rate class to which the eligible customer-generator would
40 otherwise be assigned if the customer did not own, lease, rent, or

otherwise operate an eligible solar or wind electrical generating facility are contrary to the intent of this section, and shall not form a part of net energy metering contracts or tariffs.

(h) For eligible residential and small commercial customer-generators, the net energy metering calculation shall be made by measuring the difference between the electricity supplied to the eligible customer-generator and the electricity generated by the eligible customer-generator and fed back to the electric grid over a 12-month period. The following rules shall apply to the annualized net metering calculation:

(1) The eligible residential or small commercial customer-generator shall, at the end of each 12-month period following the date of final interconnection of the eligible customer-generator's system with an electric service provider, and at each anniversary date thereafter, be billed for electricity used during that period. The electric service provider shall determine if the eligible residential or small commercial customer-generator was a net consumer or a net producer of electricity during that period.

(2) At the end of each 12-month period, where the electricity supplied during the period by the electric service provider exceeds the electricity generated by the eligible residential or small commercial customer-generator during that same period, the eligible residential or small commercial customer-generator is a net electricity consumer and the electric service provider shall be owed compensation for the eligible customer-generator's net kilowatthour consumption over that same period. The compensation owed for the eligible residential or small commercial customer-generator's consumption shall be calculated as follows:

(A) For all eligible customer-generators taking service under tariffs employing "baseline" and "over baseline" rates, any net monthly consumption of electricity shall be calculated according to the terms of the contract or tariff to which the same customer would be assigned to or be eligible for if the customer was not an eligible customer-generator. If those same customer-generators are net generators over a billing period, the net kilowatthours generated shall be valued at the same price per kilowatthour as the electric service provider would charge for the baseline quantity of electricity during that billing period, and if the number of

1 kilowatthours generated exceeds the baseline quantity, the excess
2 shall be valued at the same price per kilowatthour as the electric
3 service provider would charge for electricity over the baseline
4 quantity during that billing period.

5 (B) For all eligible customer-generators taking service under
6 tariffs employing “time of use” rates, any net monthly
7 consumption of electricity shall be calculated according to the
8 terms of the contract or tariff to which the same customer would
9 be assigned to or be eligible for if the customer was not an eligible
10 customer-generator. When those same customer-generators are
11 net generators during any discrete time of use period, the net
12 kilowatthours produced shall be valued at the same price per
13 kilowatthour as the electric service provider would charge for
14 retail kilowatthour sales during that same time of use period. If the
15 eligible customer-generator’s time of use electrical meter is unable
16 to measure the flow of electricity in two directions, paragraph (3)
17 of subdivision (b) shall apply.

18 (C) For all residential and small commercial
19 customer-generators and for each billing period, the net balance of
20 moneys owed to the electric service provider for net consumption
21 of electricity or credits owed to the customer-generator for net
22 generation of electricity shall be carried forward as a monetary
23 value until the end of each 12-month period. For all commercial,
24 industrial, and agricultural customer-generators the net balance of
25 moneys owed shall be paid in accordance with the electric service
26 provider’s normal billing cycle, except that if the commercial,
27 industrial, or agricultural customer-generator is a net electricity
28 producer over a normal billing cycle, any excess kilowatthours
29 generated during the billing cycle shall be carried over to the
30 following billing period as a monetary value, calculated according
31 to the procedures set forth in this section, and appear as a credit on
32 the customer-generator’s account, until the end of the annual
33 period when paragraph (3) shall apply.

34 (3) At the end of each 12-month period, where the electricity
35 generated by the eligible customer-generator during the 12-month
36 period exceeds the electricity supplied by the electric service
37 provider during that same period, the eligible customer-generator
38 is a net electricity producer and the electric service provider shall
39 retain any excess kilowatthours generated during the prior
40 12-month period. The eligible customer-generator shall not be

1 owed any compensation for those excess kilowatthours unless the
2 electric service provider enters into a purchase agreement with the
3 eligible customer-generator for those excess kilowatthours.

4 (4) The electric service provider shall provide every eligible
5 residential or small commercial customer-generator with net
6 electricity consumption information with each regular bill. That
7 information shall include the current monetary balance owed the
8 electric service provider for net electricity consumed since the last
9 12-month period ended. Notwithstanding this subdivision, an
10 electric service provider shall permit that customer to pay monthly
11 for net energy consumed.

12 (5) If an eligible residential or small commercial
13 customer-generator terminates the customer relationship with the
14 electric service provider, the electric service provider shall
15 reconcile the eligible customer-generator's consumption and
16 production of electricity during any part of a 12-month period
17 following the last reconciliation, according to the requirements set
18 forth in this subdivision, except that those requirements shall apply
19 only to the months since the most recent 12-month bill.

20 (6) If an electric service provider providing net metering to a
21 residential or small commercial customer-generator ceases
22 providing that electrical service to that customer during any
23 12-month period, and the customer-generator enters into a new net
24 metering contract or tariff with a new electric service provider, the
25 12-month period, with respect to that new electric service
26 provider, shall commence on the date on which the new electric
27 service provider first supplies electric service to the
28 customer-generator.

29 (i) Notwithstanding any other provisions of this section, the
30 following provisions shall apply to an eligible customer-generator
31 with a capacity of more than 10 kilowatts, but not exceeding one
32 megawatt, that receives electrical service from a local publicly
33 owned electric utility, as defined in Section 9604, that has elected
34 to utilize a co-energy metering program unless the electric service
35 provider chooses to provide service for eligible
36 customer-generators with a capacity of more than 10 kilowatts in
37 accordance with subdivisions (g) and (h):

38 (1) The eligible customer-generator shall be required to utilize
39 a meter, or multiple meters, capable of separately measuring
40 electricity flow in both directions. All meters shall provide

1 “time-of-use” measurements of electricity flow, and the customer
2 shall take service on a time-of-use rate schedule. If the existing
3 meter of the eligible customer-generator is not a time-of-use meter
4 or is not capable of measuring total flow of energy in both
5 directions, the eligible customer-generator shall be responsible for
6 all expenses involved in purchasing and installing a meter that is
7 both time-of-use and able to measure total electricity flow in both
8 directions. This subdivision shall not restrict the ability of an
9 eligible customer-generator to utilize any economic incentives
10 provided by a government agency or the electric service provider
11 to reduce its costs for purchasing and installing a time-of-use
12 meter.

13 (2) The consumption of electricity from the electric service
14 provider shall result in a cost to the eligible customer-generator to
15 be priced in accordance with the standard rate charged to the
16 eligible customer-generator in accordance with the rate structure
17 to which the customer would be assigned if the customer did not
18 use an eligible solar or wind electrical generating facility. The
19 generation of electricity provided to the electric service provider
20 shall result in a credit to the eligible customer-generator and shall
21 be priced in accordance with the generation component,
22 established under the applicable structure to which the customer
23 would be assigned if the customer did not use an eligible solar or
24 wind electrical generating facility.

25 (3) All costs and credits shall be shown on the eligible
26 customer-generator’s bill for each billing period. In any months in
27 which the eligible customer-generator has been a net consumer of
28 electricity calculated on the basis of value determined pursuant to
29 paragraph (2), the customer-generator shall owe to the electric
30 service provider the balance of electricity costs and credits during
31 that billing period. In any billing period in which the eligible
32 customer-generator has been a net producer of electricity
33 calculated on the basis of value determined pursuant to paragraph
34 (2), the electric service provider shall owe to the eligible
35 customer-generator the balance of electricity costs and credits
36 during that billing period. Any net credit to the eligible
37 customer-generator of electricity costs may be carried forward to
38 subsequent billing periods, provided that an electric service
39 provider may choose to carry the credit over as a kilowatt hour
40 credit consistent with the provisions of any applicable tariff,



including any differences attributable to the time of generation of the electricity. At the end of each 12-month period, the electric service provider may reduce any net credit due to the eligible customer-generator to zero.

(j) A solar or wind turbine electrical generating system, or a hybrid system of both, used by an eligible customer-generator shall meet all applicable safety and performance standards established by the National Electrical Code, the Institute of Electrical and Electronics Engineers, and accredited testing laboratories such as Underwriters Laboratories and, where applicable, rules of the Public Utilities Commission regarding safety and reliability. A customer-generator whose solar or wind turbine electrical generating system, or a hybrid system of both, meets those standards and rules shall not be required to install additional controls, perform or pay for additional tests, or purchase additional liability insurance.

(k) If the commission determines that there are cost or revenue obligations for an electric corporation, as defined in Section 218, that may not be recovered from customer-generators acting pursuant to this section, those obligations shall remain within the customer class from which any shortfall occurred and may not be shifted to any other customer class. Net-metering and co-metering customers shall not be exempt from the public benefits charge. In its report to the Legislature, the commission shall examine different methods to ensure that the public benefits charge remains a nonbypassable charge.

(l) A net metering customer shall reimburse the Department of Water Resources for all charges that would otherwise be imposed on the customer by the commission to recover bond-related costs pursuant to an agreement between the commission and the Department of Water Resources pursuant to Section 80110 of the Water Code, as well as the costs of the department equal to the share of the department's estimated net unavoidable power purchase contract costs attributable to the customer. The commission shall incorporate the determination into an existing proceeding before the commission, and shall ensure that the charges are nonbypassable. Until the commission has made a determination regarding the nonbypassable charges, net metering shall continue under the same rules, procedures, terms, and conditions as were applicable on December 31, 2002.



(m) In implementing the requirements of subdivisions (k) and (l), a customer-generator shall not be required to replace its existing meter except as set forth in paragraph (3) of subdivision (b), nor shall the electric service provider require additional measurement of usage beyond that which is necessary for customers in the same rate class as the eligible customer-generator.

(n) On or before January 1, 2005, the commission shall submit a report to the Governor and the Legislature that assesses the economic and environmental costs and benefits of net metering to customer-generators, ratepayers, and utilities, including any beneficial and adverse effects on public benefit programs and special purpose surcharges. The report shall be prepared by an independent party under contract with the commission.

(o) It is the intent of the Legislature that the Treasurer incorporate net energy metering and co-energy metering projects undertaken pursuant to this section as sustainable building methods or distributive energy technologies for purposes of evaluating low-income housing projects.

~~SEC. 4.~~

SEC. 10. Chapter 8 (commencing with Section 2830) is added to *Part 2 of Division 1* of the Public Utilities Code, to read:

CHAPTER 8. SOLAR ENERGY PEAK PROCUREMENT PROGRAM

2830. (a) The Legislature finds and declares that:

(1) Electricity created from solar energy using photovoltaic systems provides reliable electricity during peak demand periods.

(2) Electricity generated by photovoltaic systems is a reliable substitute for the purchase of expensive, conventionally-generated electricity during peak demand periods.

(3) Electricity generated by photovoltaic systems is a substitute for demand management activities which lower peak demand.

(4) Electricity generated by photovoltaic systems is a substitute for interruptible energy programs which lower peak demand.

(5) The commission requires utilities to procure peak demand period electricity supplies and allocates those costs to all customers.

(6) The commission has established demand management programs and interruptible energy programs whose costs are allocated to all customers.

(7) It is the intent of the Legislature that this program remain in effect for 10 years and that the subsidy level per kilowatt of capacity be reduced to zero at the end of those 10 years.

(b) It is the intent of the Legislature that this program be funded at a level of *up to* one hundred million dollars (\$100,000,000) annually and that this program not result in fee or rate increases. *The commission shall not increase for any reason the amount designated for this program, regardless of any increase in applications or lack of funding.*

(c) It is the intent of the Legislature that the customers of each utility benefit in proportion to the amount paid for the program by those customers.

(d) It is the intent of the Legislature that existing photovoltaic programs be harmonized with the program established by this legislation.

~~2831. The commission shall establish the Solar Energy Peak Procurement Program, as provided in this chapter, to encourage the use of solar photovoltaic systems and shall fund that program by reducing the purchases of electricity during peak demand periods, spending unallocated funds previously authorized for demand management and interruptible programs, and substituting a photovoltaic incentive program for less cost-effective demand management and interruptible programs.~~

~~2832. (a)~~

2831. *The commission shall by January 1, 2006, open a proceeding to examine the relative costs and benefits between solar rebate programs and commission-administered interruptible and demand reduction programs, as follows:*

(a) *The proceeding shall review the self-generation incentive program administered by the commission to harmonize it with the solar energy programs administered by the California Energy Commission and shall issue a report on its recommendations to the Legislature.*

(b) *The proceeding shall include the commission conducting a cost versus benefit analysis to examine the relative costs and benefits between solar rebate programs and commission-administered interruptible and demand reduction programs that are in the best interests of ratepayers.*

1 (c) *The proceeding shall review the cost and benefits of net*
2 *metering and report to the Legislature on whether the net metering*
3 *cap should be changed.*

4 2832. *The commission shall consider how customer owned*
5 *photovoltaic distributed generation pursuant to this program can*
6 *be integrated with future procurement plans, resource adequacy,*
7 *and energy efficiency decisions.*

8 2833. The Solar ~~Peak Energy~~ Energy Peak Procurement Fund
9 is hereby created in the State Treasury. Moneys in the fund may be
10 expended, upon appropriation by the Legislature, for the state's
11 administration of the program, to be used to encourage the
12 deployment of grid-connected solar photovoltaic systems in the
13 service territory of investor-owned utilities by subsidizing the
14 installed cost of those systems for all customer classes.

15 ~~(b) The Solar Peak Energy Affordable Housing Revolving~~
16 ~~Fund is hereby created in the State Treasury. Moneys in the fund~~
17 ~~may be expended, upon appropriation by the Legislature, for the~~
18 ~~state's administration of the program established by this chapter,~~
19 ~~to be used to encourage the deployment of grid-connected solar~~
20 ~~photovoltaic systems in the service territory of investor-owned~~
21 ~~utilities by subsidizing the installed cost of those systems~~
22 ~~exclusively for affordable housing units, as defined in subdivision~~
23 ~~(a) of Section 26420 of the Public Resources Code.~~

24 2833.

25 2834. The commission shall direct utilities to regularly
26 deposit a portion of the moneys derived from electric rates into the
27 Solar Peak Energy Procurement Fund. The commission shall
28 determine the amount of electric rates to be deposited. That
29 amount shall come from ~~unallocated~~ *unused* funds previously
30 authorized for demand management and interruptible programs
31 and rates which previously paid for demand management and
32 interruptible programs which the commission determines to be
33 less cost effective than the photovoltaic incentive program
34 established by Division 16.7 (commencing with Section 26420) of
35 the Public Resources Code.

36 ~~SEC. 5. This act shall not be operative unless Assembly Bill~~
37 ~~2006 of the 2003-04 Session of the Legislature is enacted.~~

38 2835. *On or before December 31, 2005, the commission shall*
39 *report to the Legislature on whether the commission was able to*
40 *obtain funding from existing programs sufficient to achieve the*

- 1 *purposes of the act enacting this chapter, and shall submit*
- 2 *recommendations for additional funding sources, if necessary.*
- 3 *SEC. 11.*

O

